

THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON WASHINGTON, DC 20301-3010

SUN 11 TOB

MEMORANDUM FOR CHAIRMAN, DEFENSE SCIENCE BOARD

SUBJECT: Terms of Reference – Defense Science Board (DSB) Task Force on Military Applications of Synthetic Biology

You are requested to form a DSB Task Force on the Military Applications of Synthetic Biology. Traditional applications of biotechnology have concentrated on applications in healthcare (e.g., pathogen weaponization, therapeutics, and vaccines) agricultural productivity and environmental sustainability. Advances in understanding fundamental biological science have created the ability to manipulate cellular, subcellular and molecular components in living things in more precise ways and with greater understanding and predictability of outcomes. Recent advances in biotechnology present many new possibilities in increasingly diverse areas (e.g., materials and energy) while also enriching the spectrum of the more traditional biotechnology applications (health, medical, agriculture, etc). Novel applications, which combine traditional and new research areas, suggest new interdisciplinary fields that will have important defense applications.

The study should survey developments in biotechnology and attempt to project transition paths from research into current and future defense applications. In addition, the study should identify barriers to development and adoption of new applications to include policy issues, scientific and technological talent, and government business practices.

The study will be co-sponsored by me as the Under Secretary of Defense for Acquisition, Technology and Logistics and the Principal Deputy, Defense Research and Engineering. Dr. George Poste will serve as Study Chairman. Dr. Fred Pearce will serve as the Executive Secretary and Lieutenant Colonel Chad Lominac, USAF, will serve as the DSB Secretariat Representative.

The Task Force will operate in accordance with the provisions of P.L. 92-463, the "Federal Advisory Committee Act," and DoD Directive 5105.4, the "DoD Federal Advisory Committee Management program." It is not anticipated that this Task Force will need to go into any "particular matters" within the meaning of title 18, United States Code, section 208, nor will it cause any member to be placed in the position of action as a procurement official.

John J. Young, fr.